

Recovery Plan Action Status

Plan Name: Bunched Arrowhead

Plan Status: Final

Plan Date: 08-Sep-83

Lead Agency: USFWS

Lead Office: Asheville Ecological Services Field Office

(258-3939)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bunched arrowhead (Sagittaria fasciculata)	2	111	Estimate current colony and population size and vigor	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta	Research: Population Surveys	Contract, Volunteer	
Bunched arrowhead (Sagittaria fasciculata)	2	112	Determine population/colony priority	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Other: Information and Education	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Bunched arrowhead (Sagittaria fasciculata)	2	113	Determine land ownership patterns	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta	Acquisition: Other	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Bunched arrowhead (Sagittaria fasciculata)	1	12	Obtain the most appropriate and highest protection for each population of colony	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Acquisition: Easement, Acquisition: Exchange, Acquisition: Fee Title, Acquisition: General, Acquisition: Lease, Acquisition: Management Agreement, Acquisition: Other, Acquisition: Withdrawal	Contract, Graduate Student, Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Bunched arrowhead (Sagittaria fasciculata)	2	13	Manage population to ensure survival of plants	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Management: Habitat Maintenance and Manipulation, Management: Predator and Competitor Control	Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Bunched arrowhead (Sagittaria fasciculata)	1	21 - 22	Study abiotic and biotic factors of species habitat	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Research: Competition, Research: Habitat Requirements, Research: Management Techniques	Contract, Volunteer	

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Bunched arrowhead (Sagittaria fasciculata)	2	23	Conduct demographic studies	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Work type not yet selected	Labor type not yet selected	
Bunched arrowhead (Sagittaria fasciculata)	2	24	Search for additional populations	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta	Research: Other Information	Contract	
Bunched arrowhead (Sagittaria fasciculata)	3	25	Utilize data collected in 2.1-2.4 and determine species' essential habitat	Not Started			U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Work type not yet selected	Labor type not yet selected	

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Bunched arrowhead (Sagittaria fasciculata)	3	3	Conduct transplant and propagation studies and transplant where required to meet recovery	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Work type not yet selected	Labor type not yet selected	
Bunched arrowhead (Sagittaria fasciculata)	3	4	Monitor colonies, populations, permanent plots, transplants and propagation facilities	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Work type not yet selected	Labor type not yet selected	

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Bunched arrowhead (Sagittaria fasciculata)	1	5	Enforce laws and regulations protecting species and habitat	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, Law Enforcement Division, U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Other: Law Enforcement, Other: Regulations	Labor type not yet selected	
Bunched arrowhead (Sagittaria fasciculata)	3	6	Public education	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Endangered Species Division, The Nature Conservancy, North Carolina Department of Agriculture, Public Affairs Office , South Carolina Wildlife and Marine Resources Department , USFWS Regional Office 4 - Atlanta, North Carolina Sagittaria Management Team	Other: Information and Education	Labor type not yet selected	